

## **West-Cap Project Area (Part of the TIAA CERCLA Site)**

### **Boundaries:**

The West-Cap project area is in Area B of the Tucson International Airport Area (TIAA) site, just south of the Texas Instruments project area and southeast of the Arizona Air National Guard (AANG) project area. It is located at 2207 East Elvira Road between Plumer Avenue and South Tucson Boulevard.

### **Site History:**

- From the early 1960's to the early 1980's, the property was occupied by the former West-Cap of Arizona Corporation which manufactured small film capacitors and magnets and used solvents as part of their manufacturing process.
- West-Cap manufacturing and disposal practices resulted in the release of hazardous wastes (mainly trichloroethene (TCE), tetrachloroethene (PCE), and 1,1,1-trichloroethane (1,1,1-TCA)) into the soil and groundwater.
- The TIAA site was placed on the National Priorities List (NPL) in 1983.
- In 1988, a Record of Decision (ROD) for the regional groundwater at TIAA was issued by EPA. This ROD also covered groundwater contamination in Area B which includes the West-Cap project area.
- In January 1992, a groundwater pump and treat system for Texas Instruments began. This system apparently captured some West-Cap contamination and spread it northward.
- Between March 1997 and November 1999, the pump and treat system at Texas Instruments was discontinued while EPA built a groundwater extraction system at the West-Cap project area.
- In 1996, a shallow soil gas survey was conducted by EPA. This survey identified two potential source areas with elevated levels of TCE, tetrachloroethene (PCE), 1,1,1-TCA, and 1,1-dichloroethene (1,1-DCE).
- In 1998, as part of an EPA-sponsored Removal Action, several groundwater extraction wells were installed. These wells pump TCE contaminated groundwater northward to the Texas Instruments water treatment plant where it is cleaned and used in manufacturing processes.

**Site Status:**

- West-Cap is an EPA funded site, meaning that no existing or financially viable responsible party has been identified.
- EPA's groundwater removal action has removed approximately 3.6 pounds of TCE and PCE from about 89.1 million gallons of groundwater.
- Two groundwater monitoring wells were recently installed. One of these wells (WC-9) shows TCE contamination northwest of the West-Cap property on the Airport Property.
- Some groundwater contamination from West-Cap has apparently migrated westward toward the AANG project area where it is extracted and treated in the AANG treatment plant.
- Two additional groundwater monitoring wells were installed for Remedial Design. Data from these wells were analyzed to determine whether additional groundwater extraction wells are needed at the West-Cap site. One monitoring well was installed upgradient of West-Cap to determine if there are any upgradient sources.
- In May 2002, a Remedial Investigation (RI) addendum and a Feasibility Study (FS) report were completed. In September 2004, EPA issued an amended ROD for groundwater at this site (and West Plume B).
- EPA and ADEQ began Remedial Design (RD) of additional extraction wells and associated piping to the Texas Instruments treatment plant in 2005. It is hoped that these additional extraction wells will capture all the West-Cap plume and prevent any further migration of contaminants toward Texas Instruments or the AANG property.

**Site Hydrogeology:**

- In Area B of the TIAA site, which includes the West-Cap project area, the regional aquifer is comprised of two aquifer zones separated by a middle aquitard. The middle aquitard limits the vertical extent of contamination to the upper zone of the regional aquifer which is about 70 to 100 feet thick. The upper zone of the regional aquifer can also be further subdivided into upper and lower subunits.
- The lateral continuity of the upper and lower subunits is difficult to estimate due to heterogeneities resulting from the meandering streams that deposited these sediments. In places, the streams deposited relatively coarse-grained sands and gravels, but in other areas fine-grained overbank and floodplain deposits were left behind.
- Due to the spatially variable erosional and depositional history, in some areas the upper and lower coarse-grained subunit may not exist, and the upper zone of the regional aquifer may be locally composed of almost entirely fine-grained sediments.

- The upper zone of the regional aquifer extends from the water table at a depth of about 85 to 100 feet below ground surface (bgs), to the top of the middle aquitard at a depth of about 175 feet bgs.
- The groundwater flow direction in the upper zone of the regional aquifer is generally toward the northwest, but flow within the coarse-grained upper and lower subunits is more toward the west.
- More detailed descriptions of the hydrogeology of the AANG project area can be found in reports and studies available at the TIAA Information Repository.

### **Contaminants:**

The current contaminants of concern in groundwater include volatile organic compounds (VOCs), mainly TCE. TCE concentrations range from non-detect to about 540 parts per billion (ppb). Contaminants of concern at the site may change as new data become available.

### **Public Health Impact:**

All municipal wells in the area that were contaminated with TCE have been shut down. Most of the domestic wells have either been shut down or converted to irrigation wells. However, a few residents with domestic wells with low levels of TCE have chosen to continue using their wells.

### **Community Involvement Activities:**

To provide community members with an opportunity to learn about the cleanup process and to obtain local perspective for decisions concerning the cleanup, a Unified Community Advisory Board (UCAB) was formed in 1995. The UCAB meets the third Wednesday of January, April, July, and October. These meetings occur at 6:00 p.m. at the El Pueblo Community Center located at 101 W. Irvington Rd. in Tucson and are open to the public.

Recent EPA fact sheets include: *EPA Proposes Plan to Address Groundwater Contamination at West-Cap and West Plume B Project Areas* (June 2002). In addition, the U.S. Air Force publishes a semi-annual progress report for activities at Air Force Plant 44.

**Information Repositories:**

Interested parties can review site information at the information repository at the TCE Superfund Information Library located at 101 W. Irvington Road, within the El Pueblo Branch Library in Tucson, (520) 791-4733. Site information is also available at both ADEQ's Southern Regional Office located at 400 W. Congress, Suite 433 in Tucson, and the main office located at 1110 W. Washington Street in Phoenix. Files are available for review Monday through Friday from 8:00 a.m. to 5:00 p.m. Please call (520) 628-6715 to arrange a file review appointment at the Southern Regional Office. To arrange for a time to review the site file at the main ADEQ office, please call the ADEQ Records Center (602) 771-4378 or (800) 234-5677 (Arizona toll-free).

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\*In Arizona, but outside the Tucson area, call toll-free at (888) 271-9302.

\*\*Call EPA's toll-free message line at (800) 231-3075.